Ecology of the White-browed Nuthatch Sitta victoriae in Natmataung National Park, Myanmar, with notes on other significant species

THET ZAW NAING

Surveys were carried out in temperate pine and oak forest at 2,450–3,054 m in Natmataung National Park, Myanmar during November 2001–July 2002. A total of 197 species were recorded in or around the park, including the Endangered White-browed Nuthatch *Sitta victoriae*, three Vulnerable species (Mrs Hume's Pheasant *Syrmaticus humiae*, Blyth's Tragopan *Tragopan blythii*, Grey-sided Thrush *Turdus feae*), six Near Threatened species and four species recorded for the first time in West Myanmar. The first detailed observations on the ecology, foraging and breeding behaviour of the White-browed Nuthatch were carried out, and three nests were found. White-browed Nuthatches were usually seen alone (66.3% of observations), and mainly in *Quercus semecarpifolia* trees (50%). Gleaning insects from mosses, lichens and epiphytes was the commonest foraging technique (87.6% of observations).

INTRODUCTION

Natmataung (Mount Victoria) National Park is located at 21°19'N 93°55'E in Mindat district, Chin state, in the southern Chin Hills of West Myanmar. It covers an area of 723 km² of mountainous terrain, including Mount Victoria (3,054 m), the highest mountain in west and central Myanmar. The park falls within the Eastern Himalayas Endemic Bird Area (Stattersfield *et al.* 1998). Chin State is characterised by subtropical montane forest, with tropical moist forest in the west. However, the park is distinguished by its temperate montane forest (David 1964). The park has three seasons: a long rainy season with an annual rainfall >1,000 mm; a cold season with snowfall; and a short summer with temperatures up to 20°C.

White-browed Nuthatch *Sitta victoriae* is listed as Endangered because it has a very small range, and a population which is inferred to be declining (BirdLife International 2000). It is one of four bird species strictly endemic to Myanmar, and it is found only from the area around MountVictoria (Robson 2000). The species is totally protected in Myanmar under the Wildlife Act of 1994.

The Chin hills were first explored ornithologically by Lieutenant H. Wood, who visited Mount Victoria and nearby areas during the winter of 1901–1902 (Wood and Finn 1902). Following Wood's initial findings, Colonel G. Rippon spent several months on Mount Victoria in 1904 collecting a large number of specimens (Robson et al. 1998). A German team spent six months on Mount Victoria and collected 6,000 specimens in 1937 (Stresemann and Heinrich 1940). In 1980, J. A Sayer surveyed the park, but failed to find White-browed Nuthatch (Sayer 1983). Robson et al. (1998) found 164 species in the park in March-April 1995. No studies have focused specifically on White-browed Nuthatch, so I studied the bird fauna of the park from 1997 to 2000, and investigated the ecology and breeding behaviour of the White-browed Nuthatch (Naing 1999, 2000).

METHODS

The study area was located in the south-eastern part of Natmataung national park. A 12 km transect route was set up, starting at a point 17 km east of Kanpetlet township (at 2,450 m) and ending at the Mount Victoria summit (3,054 m). The vegetation along the transect was dominated by tall open pine forest Pinus khasiya mixed with oak Quercus semecarpifolia and rhododendron Rhododendron arboreum. Dwarf bamboo Arundinaria racemosa also occurs in the understorey and in thickets open areas. Above 2,700 m the forest was dominated by Quercus semecarpifolia, with abundant epiphytes, lichens, mosses, orchids and ferns. Field surveys were carried out with the help of volunteers, by walking along the transect during November 2001, March, April and July 2002, for c.15 days per month. When White-browed Nuthatches were observed, the number of individuals, altitude, vegetation, foraging behaviour and any breeding behaviour were recorded.

RESULTS AND DISCUSSION

A total of 206 species were recorded in or around Natmataung National Park (see Appendix). Whitebrowed Nuthatches were recorded at 2,450-3,005 m, which matches the altitude of 2,500–3,000 recorded by Stresemann and Heinrich (1940). Most observations were of single individuals (66.3% of 483 observations), with pairs forming 28.3% of observations, and flocks (of up to four individuals) forming 5.3%. The main tree species used were Quercus semecarpifolia (50% of 483 observations), Rhododendron arboreum (16.4%), Lyonia ovalifolia (8%), Lithocarpus dealbatus (6%), Pinus khasiya (5.2%) and Alnus nepalensis (4.8%). White-browed Nuthatches fed on small insects which were usually gleaned from mosses, lichens and epiphytes (87.6% of 250 foraging observations), or probed from behind dislodged bark (10.4%). Most foraging observations were in the outer branches (69.6%), and less frequently on the inner branches (19.6%) or trunks (10.8%).

Table 1. Additional species of interest recorded in Natmataung National Park, Myanmar.

Species	Status	Records
Species of conservation interest		
Mrs Hume's Pheasant Syrmaticus humiae	VU	One male seen in mixed pine-oak forest at 2,510 m on 6 April
Blyth's Tragopan Tragopan blythii	VU	A total of nine heard at 2,510–2,750 m on 16 March–15 April and a group of one male and two females seen at 2,680 m on 10 April
Black-breasted Thrush Turdus dissimilis	NT	A flock of 7–9 at 2,510 m in March–April
Grey-sided Thrush Turdus feae	VU	Three flocks of 5-15 at 2,040-2,550 m on 12 March-16 April
Broad-billed Warbler Tickellia hodgsoni	NT	Heard daily and seen occasionally at 2,450–2,745 m throughout the survey
Striped Laughingthrush Garrulax virgatus	NT	Three in dwarf bamboo <i>Arundinaria racemosa</i> at 2,340 m on 15 November and at 1,910 m on 17 March
Slender-billed Scimitar Babbler Xiphirhynchus superciliaris	NT	One at 2,735 on 30 March and five at 2,753 on 15 April
Black-headed Shrike Babbler Pteruthius rufiventer	NT	A male at 2,400 m on 10 April and a pair at 2,520 m on 21 July
Grey Sibia Heterophasia gracilis	NT	Several seen at 1,910–3,025 m throughout the survey
First records for west Myanmar		
Oriental Scops Owl Otus sunia		Adult rufous morph in pine forest at 1,980 m on 12 November
Grey-backed Shrike Lanius tephronotus		Two at 1,930 m on 10 March and one at 2,000 m on 21 April
Grey-cheeked Warbler Seicercus poliogenys		Two at 1,980 m on 28 November
Dark-breasted Rosefinch Carpodacus nipalensis		Seven at 2,520 m on 24 November and one at 2,550 m on 14 April

Three nests were found: (1) at 2,750 m on 12 March 2002 when a female was found nest-building in the cavity of an inner branch of a *Quercus semecarpifolia* tree at a height of 10 m; (2) at 2,510 m on 3 April when a nest with chicks was found in an inner branch of a *Q. semecarpifolia* tree at a height of 4 m; and (3) at 2,750 m on 7 April when a nest with chicks was found in the trunk of a *Rhododendron arboreum* tree at a height of 6 m. The first nest was built (by the female only) in about six days. None of the nests had mud plastered around the entrance hole, unlike many other *Sitta* species. Only females were seen to enter the nest-hole to feed chicks. In April, three flocks each with two recently fledged young were observed.

Nine other species of conservation interest were recorded (threat status is taken from BirdLife International 2000) and four other species were recorded for the first time in west Myanmar (Smythies 1953, King *et al.* 1975, Robson 2000).

A total of 78 villages with a population of c.12,000 (in 1996) are located in the park. Shifting cultivation and illegal logging cause annual habitat loss of 2,025 ha (Shein Gay Ngai 1996). Fires started by local people during the dry season also threaten the forests in Natmataung national park. In addition, birds are hunted using guns, snares (for tragopans and pheasants) and gum traps (for smaller birds). Improved protection should be afforded to the park, and environmental awareness programmes should be initiated to discourage burning and hunting.

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APPENDIX

Species record in Natmataung National Park, Myanmar.

Species	Category	Status		Abun	dance		Altitude (m)
			Nov	Mar	Apr	Jul	
HILL PARTRIDGE Arborophila torqueola		Res	R	U	U		Up to 3,005 *
Mountain Bamboo Partridge Bambusicola fytchii		Res	U	U	U	U	Up to 2,580
Blyth's Tragopan Tragopan blythii	VU	Res		R	U		Up to 2,750
KALIJ PHEASANT Lophura leucomelanos		Res	R	R	U	R	Up to 2,510
MRS HUME'S PHEASANT Syrmaticus humiae	VU	Res			R		2,470
GREY PEACOCK PHEASANT Polyplectron bicalcaratum		Res	Х				2,320 *
SPECKLED PICULET Picumnus innominatus		Res			Х		1,935 *
WHITE-BROWED PICULET Sasia ochracea		Res	Χ				1,910 *
FULVOUS-BREASTED WOODPECKER Dendrocopos macei		Res	Х	Х		Х	Up to 2,110
STRIPE-BREASTED WOODPECKER D. atratus		Res	X	Х			Up to 2,165
RUFOUS-BELLIED WOODPECKER D. hyperythrus		Res	С	С	С	С	Up to 2,750
CRIMSON-BREASTED WOODPECKER D. cathpharius		Res	Х		R		Up to 2,550
DARJEELING WOODPECKER <i>D. darjellensis</i>		Res	R	R	U	U	Up to 2,750
Lesser Yellownape Picus chlorolophus		Res	Х		X	X	1,910
GREATER YELLOWNAPE P. flavinucha		Res	X	X		Х	Up to 2,320
BAY WOODPECKER Blythipicus pyrrhotis		Res	R	R	R	X	Up to 2,750
GREAT BARBET Megalaima virens		Res	A	A	A	A	Up to 2,647
GOLDEN-THROATED BARBET M. franklinii		Res	A	A	A	A	Up to 2,750
BLUE-THROATED BARBET <i>M. asiatica</i>		Res			U		2,510
LARGE HAWK CUCKOO Hierococcyx sparverioides		Res		X	<u>X</u>	X	Up to 2,385
Eurasian Cuckoo <i>Cuculus canorus</i>		BV			X		Up to 1,980
Indian Cuckoo C. micropterus		Res	X				1,910
ORIENTAL CUCKOO C. saturatus		BV			X		1,920
ASIAN EMERALD CUCKOO Chrysococcyx maculatus		Res					2,380
GREY-HEADED PARAKEET Psittacula finschii		Res	X		X		1,910 *
HIMALAYAN SWIFTLET Collocalia brevirostris		Res	Δ		X X		2,150
ORIENTAL SCOPS OWL Otus sunia		Res	X		A		1,980
Collared Scops Owl O. bakkamoena							
		Res	X			D	1,985
TAWNY OWL Strix aluco		Res				R	2,510
Collared Owlet Glaucidium brodiei		Res				R	2,515
ASIAN BARRED OWLET G. cuculoides		Res		_		X	1,910
HODGSON'S FROGMOUTH Batrachostomus hodgsoni		Res				X	1,910
GREY NIGHTJAR Caprimulgus indicus		Res			X		2,380
ASHY WOOD PIGEON Columba pulchricollis		Res	R	U	U	R	Up to 2,550
ORIENTAL TURTLE DOVE Streptopelia orientalis		Res	Х	Х	X		Up to 1,925
SPOTTED DOVE S. chinensis		Res	Х		Х	X	Up to 1,940
WEDGE-TAILED GREEN PIGEON Treron sphenura		Res	R			U	2,510
ORIENTAL HONEY-BUZZARD Pernis ptilorhyncus		Res		Х			1,990
CRESTED SERPENT EAGLES pilornis cheela		Res			R		2,400
CRESTED GOSHAWK Accipiter trivirgatus		Res		X			1,910
BESRA A. virgatus		Res	X				1,925
EURASIAN SPARROW HAWK A. nisus		WV	R				2,585
Common Buzzard Buteo buteo		WV	С	С	С		2,728
BLACK EAGLE Ictinaetus malayensis		Res	С	С	С	R	Up to 3,015
CHANGEABLE HAWK EAGLE Spizaetus cirrhatus		Res			R		2,520
Collared Falconet Microhierax caerulescens		Res		Х			Up to 2,310 *
ORIENTAL HOBBY Falco severus		Res		X			1,915 *
LONG-TAILED BROADBILL Psarisomus dalhousiae		Res		Х	X		2,000
ASIAN FAIRY BLUEBIRD Irena puella		Res	Х				2,340
[GOLDEN-FRONTED LEAFBIRD Chloropsis aurifrons]		Res					2,545 *
ORANGE-BELLIED LEAFBIRD C. hardwickii		Res	Х		X		1,910

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Species	Category	Status		Abundance			Altitude (m)
			Nov	Mar	Apr	Jul	
Burmese Shrike Lanius collurioides		Res		Х			1,995 *
Long-tailed Shrike L. schach		Res	Х	X			2,080
GREY-BACKED SHRIKE L. tephronotus		NR		Х	X		Up to 2,000
Eurasian Jay Garrulus glandarius		Res	С	С	С	С	Up to 2,585
YELLOW-BILLED BLUE MAGPIE Urocissa flavirostris		Res	С	С	С	R	Up to 2,750
RED-BILLED BLUE MAGPIE U. erythrorhyncha		Res	Х	Х		X	Up to 1,940 *
GREY TREEPIE Dendrocitta formosae		Res	X	X	Х	Х	Up to 2,130
LARGE-BILLED CROW Corvus macrorhynchos		Res	С	С	С	С	Up to 2,550
ASHY WOODSWALLOW Artamus fuscus		Res			Х		1,910
SLENDER-BILLED ORIOLE Oriolus tenuirostris		Res	X				1,910
Maroon Oriole O. traillii		Res	R	R	U		Up to 2,710 *
LARGE CUCKOOSHRIKE Coracina macei		Res		U	U	U	Up to 2,710 *
GREY-CHINNED MINIVET Pericrocotus solaris		Res			X		2,350 *
LONG-TAILED MINIVET P. ethologus		Res	А	А	А	A	Up to 2,750
SHORT-BILLED MINIVET P. brevirostris		Res		X			2,130
BAR-WINGED FLYCATCHER-SHRIKE Hemipus picatus		Res		X			1,980 *
YELLOW-BELLIED FANTAIL Rhipidura hypoxantha		Res	A	A	A	А	Up to 2,528
WHITE-THROATED FANTAIL R. albicollis		Res	C	C	C	C	Up to 2,750
Ashy Drongo Dicrurus leucophaeus		Res	C	C	C		Up to 2,750 *
Spangled Drongo <i>D. hottentottus</i>		Res	X	X			Up to 1,995
CHESTNUT-BELLIED ROCK THRUSH Monticola rufiventris		Res	C	C	С	С	Up to 2,700 *
BLUE WHISTLING THRUSH Myophonus caeruleus		Res	U	U	U	U	Up to 2,700
Long-tailed Thrush Zoothera monticola		?	C	U	U		Up to 2,518
SCALY THRUSH Z. dauma		Res		U	U	U	Up to 2,518
BLACK-BREASTED THRUSH Turdus dissimilis	NT	Res	0	U	U	0	2,510
CHESTNUT THRUSH T. rubrocanus		WV					2,310
GREY-SIDED THRUSH T. feae	VU	WV		<u>X</u>	U		Up to 2,550
Eyebrowed Thrush T. obscurus	¥0	WV	U	R	R		Up to 2,518
LESSER SHORTWING Brachypteryx leucophrys		Res		K	R		2,550 *
WHITE-BROWED SHORTWING B. montana		Res		R	K		2,746 *
VERDITER FLYCATCHER Eumyias thalassina		Res		C	С	С	Up to 2,740 *
			<u> </u>		<u> </u>	R	2,510
DARK-SIDED FLYCATCHER Muscicapa sibirica		Res		R	C		
SLATY-BACKED FLYCATCHER Ficedula hodgsonii	•	Res		C	C		Up to 2,750 *
RUFOUS-GORGETED FLYCATCHER <i>F</i> strophiata		Res	A	A	A	R	Up to 2,865
WHITE-GORGETED FLYCATCHER F. monileger		Res	X			~	1,910
SNOWY-BROWED FLYCATCHER F. hyperythra		Res	U	<u> </u>	<u> </u>	R	Up to 2,750 *
LITTLE PIED FLYCATCHER F westermanni		Res	R	R	R	R	Up to 2,530
SLATY-BLUE FLYCATCHER F. tricolor		Res		C	C	R	Up to 2,750 *
LARGE NILTAVA Niltava grandis		Res	C	<u>C</u>	С	U	Up to 2,520
RUFOUS-BELLIED NILTAVA N. sundara		Res	R	U	R	R	Up to 2,720 *
[WHITE-TAILED FLYCATCHER Cyornis concretus]		NR				X	1,910 *
[HILL BLUE FLYCATCHER C. banyumas]		NR		U	R	R	Up to 2,750 *
GREY-HEADED CANARY FLYCATCHER Culicicapa ceylonensi	S	Res	R	R	R		Up to 2,720
INDIAN BLUE ROBIN Luscinia brunnea		Res	X			Х	Up to 1,967
ORANGE-FLANKED BUSH ROBIN Tarsiger cyanurus		WV	А	A	А		Up to 2,985
[WHITE-RUMPED SHAMA Copsychus malabaricus]		Res		X			1,930 *
DAURIAN REDSTART Phoenicurus auroreus		WV	R	R			. Up to 2,585
BLUE-FRONTED REDSTART P. frontalis		?	Α	А	А		Up to 2,750 *
WHITE-TAILED ROBIN Myiomela leucura		Res			R	Х	2,480 *
WHITE-CROWNED FORKTAIL Enicurus leschenaulti		Res	Х				1,920
SPOTTED FORKTAIL E. maculatus		Res	Χ				1,920
GREY BUSHCHAT Saxicola ferrea		Res	А	А	А	А	Up to 3,054 *
[HILL MYNA Gracula religiosa]	-	Res		Х			2,010 *
CHESTNUT-VENTED NUTHATCH Sitta nagaensis		Res	A	А	А	A	Up to 2,810

Forktail 19 (2003) White-browed Nuthatch and other birds in Natmautaung National Park, Myanmar

Species	tegory	Status		Abundance			Altitude (m)
			Nov	Mar	Apr	Jul	
WHITE-TAILED NUTHATCH S. himalayensis		Res		R	R		Up to 2,500
WHITE-BROWED NUTHATCH S. victoriae	EN	Res	U	С	С	U	Up to 3,005
BAR-TAILED TREECREEPER Certhia himalayana		Res	А	А	А	А	Up to 2,890
BROWN-THROATED TREECREEPER C. discolor		Res	С	С	С	С	Up to 2,610
BLACK-BIBBED TIT Parus (palustris) hypermelaena		Res	С	С	С	С	Up to 2,710
GREEN-BACKED TIT P. monticolus		Res	С	С	С	С	Up to 2,654
YELLOW-CHEEKED TIT P. spilonotus		Res		R			2,500
YELLOW-BROWED TIT Sylviparus modestus		Res		R	R		Up to 3,010
BLACK-THROATED TIT Aegithalos concinnus		Res		R	R	-	Up to 2,450
BLACK-BROWED TIT A. bonvaloti		Res	А	А	А	А	Up to 2,985
Aslan House Martin Delichon dasypus		WV	А	А	А		Up to 2,518
CRESTED FINCHBILL Spizixos canifrons		Res	С	С	С	С	Up to 2,720 *
STRIATED BULBUL Pycnonotus striatus		Res	A	А	A	A	Up to 2,560
RED-VENTED BULBUL P. cafer		Res	X	X	X	Х	1,910 *
FLAVESCENT BULBUL P. flavescens		Res	X	X	X	X	1,910
Ashy Bulbul Hemixos flavala		Res		X			1,816
Mountain Bulbul Hypsipetes mcclellandii		Res		R	R		Up to 2,518
BLACK BULBUL H. leucocephalus		WV	U	U	U		Up to 2,518
HILL PRINIA Prinia atrogularis		Res		A	A	А	Up to 2,750 '
CHESTNUT-FLANKED WHITE-EYE Zosterops erythropleurus		WV	R				2,550
JAPANESE WHITE-EYE Z. japonicus		WV	R			R	2,550
CHESTNUT-HEADED TESIA Tesia castaneocoronata		Res	A	A	А	A	Up to 2,810 *
GREY-BELLIED TESIA T. cyaniventer		Res	U	U	U	U	Up to 2,520
ABERRANT BUSH WARBLER Cettia flavolivacea		Res		C	C		Up to 2,700 *
BROWN BUSH WARBLER Bradypterus luteoventris		Res	А	A	A	A	Up to 2,750
RUSSET BUSH WARBLER B. seebohmi [= B. mandelli]		Res	C	C	C	C	Up to 2,500 *
MOUNTAIN TAILORBIRD Orthotomus cuculatus		Res	X	0	X	X	Up to 2,150
[BUFF-THROATED WARBLER Phylloscopus subaffinis]		NR			U		Up to 2,550
YELLOW-STREAKED WARBLER P. armandii		Res		R			2,510
Buff-Barred Warbler P. pulcher		Res	A	A	А	А	Up to 3,020
Ashy-throated Warbler P. maculipennis		Res	Π	 U		A	Up to 2,975
LEMON-RUMPED WARBLER P. chloronotus		?	X	0	К		•
		-	Δ				1,910
YELLOW-BROWED WARBLER P. inornatus HUME'S WARBLER P. humei		WV	Δ	X	4		2,365
		WV	A	А	Α		Up to 2,780 *
[Two-BARRED WARBLER P. (trochiloides) plumbeitarsus]		WV	 	X T			1,910 *
BLYTH'S LEAF WARBLER P. reguloides		Res	R		U		Up to 2,550
GREY-CROWNED WARBLER Seicercus (burkii) tephrocephalus		Res	R	U	U	U	Up to 2,745
GREY-HOODED WARBLER S. xanthoschistos		Res	X	X	X		Up to 2,080
GREY-CHEEKED WARBLER S. poliogenys		Res	Х				1,980
CHESTNUT-CROWNED WARBLER S. castaniceps	NUT	Res	T T	R			2,500
<u> </u>	NT	Res	<u>U</u>	U	U	U	Up to 2,745
BLACK-FACED WARBLER Abroscopus schisticeps		Res	Х				2,335
YELLOW-BELLIED WARBLER A. superciliaris		Res		X			1,910
· · · · · · · · · · · · · · · · · · ·	NT	Res	X	X			Up to 2,340
BROWN-CAPPED LAUGHINGTHRUSH G. austeni		Res	A	А	A	A	Up to 2,980
CHESTNUT-CROWNED LAUGHINGTHRUSH G. erythrocephalus		Res	А	A	А	А	Up to 2,980
	NT	Res		R			2,510
RED-FACED LIOCICHLA Liocichla phoenicea		Res		X	X	Х	Up to 2,340
SPOT-THROATED BABBLER Pellorneum albiventre		Res	Χ			Х	1,910
SPOT-BREASTED SCIMITAR BABBLER Pomatorhinus erythrocnemis		Res		Х			1,910
WHITE-BROWED SCIMITAR BABBLER P. schisticeps		Res	X			X	Up to 2,050
STREAK-BREASTED SCIMITAR BABBLER P. ruficollis		Res	С	С	С	С	Up to 2,750 *
CORAL-BILLED SCIMITAR BABBLER P. ferruginosus		Res			X		1,910
SLENDER-BILLED SCIMITAR BABBLER Xiphirhynchus superciliaris	NT	Res		R	R		Up to 2,755

Species	Category	Status		Abun	dance		Altitude (m)
			Nov	Mar	Apr	Jul	•
LONG-TAILED WREN BABBLER Spelaeornis chocolatinus		Res	С	С	С	С	Up to 2,750
RUFOUS-FRONTED BABBLER Stachyris rufifrons		Res	Х				2,045
GOLDEN BABBLER S. chrysaea		Res	U	U	U	U	Up to 2,750
GREY-THROATED BABBLER S. nigriceps		Res		X			1,910
CHINESE BABAX Babax lanceolatus		Res	С	С	С	С	Up to 2,730
SILVER-EARED MESIA Leiothrix argentauris		Res	Х	X	X	X	1,910
CUTIA Cutia nipalensis		Res	R	R	R	R	Up to 2,500
BLACK-HEADED SHRIKE BABBLER Pteruthius rufiventer	NT	Res			R	R	Up to 2,520
WHITE-BROWED SHRIKE BABBLER P. flaviscapis		Res		X	Х	Х	Up to 2,340
GREEN SHRIKE BABBLER P. xanthochlorus		Res	U	R	U	R	Up to 2,750
BLACK-EARED SHRIKE BABBLER P. melanotis		Res		R	R	R	2,558
Rusty-fronted Barwing Actinodura egertoni		Res	U	U	U	U	Up to 2,548
STREAK-THROATED BARWING A. waldeni		Res		R	R		Up to 2,750
BLUE-WINGED MINLA Minla cyanouroptera		Res	С	С	С	С	Up to 2,520
CHESTNUT-TAILED MINLA M. strigula		Res	А	А	А	А	Up to 2,840
RED-TAILED MINLA M. ignotincta		Res	С	С	С	С	Up to 2,750
RUEOUS-WINGED FULVETTA Alcippe castaneceps		Res	А	А	А	С	Up to 2,713
WHITE-BROWED FULVETTA A. vinipectus		Res	А	А	A	А	Up to 3,040
RUSTY-CAPPED FULVETTA A. dubia		Res	U	U	U	U	Up to 2,518
NEPAL FULVETTA A. nipalensis		Res	Х			Х	Up to 2,340
RUEOUS-BACKED SIBIA Heterophasia annectans		Res			X	X	Up to 2,265
GREY SIBIA <i>H. gracilis</i>	NT	Res	А	А	А	А	Up to 3,025
WHISKERED YUHINA Yuhina flavicollis		Res	С	С	С	С	Up to 2,585
STRIPE-THROATED YUHINA Y. gularis		Res	А	А	А	А	Up to 3,010
SPOT-BREASTED PARROTBILL Paradoxornis guttaticollis		Res		X	R		Up to 2,548
BLACK-THROATED PARROTBILL P. nipalensis		Res	U	С	С	U	Up to 2,518
ORIENTAL SKYLARK Alauda gulgula		WV		R	R		Up to 3,054
YELLOW-BELLIED FLOWERPECKER Dicaeum melanoxanthum		Res		R			2,500
FIRE-BREASTED FLOWERPECKER Dicaeum ignipectus		Res	С	Ū	U	R	Up to 2,520
Mrs Gould's Sunbird A. gouldiae		Res	Х	R			Up to 2,510
GREEN-TAILED SUNBIRD A. nipalensis		Res	U	С	С	R	Up to 2,609
[BLACK-THROATED SUNBIRD A. saturata]		Res	С	С	С	U	Up to 2,550 *
FIRE-TAILED SUNBIRD Aethopyga ignicauda		Res	А	А	A	А	Up to 3,054
STREAKED SPIDERHUNTER Arachnothera magna		Res		X		X	1,910
RUSSET SPARROW Passer rutilans		Res			R		2,550
GREY WAGTAIL Motacilla cinerea		WV				Х	1,910
OLIVE-BACKED PIPIT Anthus hodgsoni		BV	А	А	А		Up to 2,860 *
SCALY-BREASTED MUNIA Lonchura punctulata		Res		X	Х	X	1,915 *
YELLOW-BREASTED GREENFINCH Carduelis spinoides		Res	С			С	Up to 2,550 *
DARK-BREASTED ROSEFINCH Carpodacus nipalensis		NR	R		R		Up to 2,550
COMMON ROSEFINCH C. erythrinus		WV	U	U	R		Up to 2,550
SCARLET FINCH Haematospiza sipahi		Res			X		1,910
BROWN BULLEINCH Pyrrhula nipalensis		Res	U	U		R	Up to 2,520 *
SPOT-WINGED GROSBEAK Mycerobas melanozanthos		Res	Х				2,330
CRESTED BUNTING Melophus lathami		Res	Х			X	Up to 2,340
LITTLE BUNTING Emberiza pusilla		WV	С	С	А		Up to 2,610 *
CHESTNUT BUNTING E. rutila		WV	С	С	R		Up to 2,510

Key

Square brackets indicate unconfirmed records

R = Rare (1-3 sightings); U = Uncommon (4-10 sightings); C = Common (generally regularly seen); A = Abundant; X = sighting outside the study area Res = resident; WV = winter visitor; BV = breeding visitor; ? = recorded (status uncertain); NR = New record for west Myanmar; * Higher than the altitudinal range previously known in South-East Asia

Thet Zaw Naing, Myanmar Bird and Nature Society, 69 Myaynigone Zay Street, Sanchaung Township, Yangon 11111, Myanmar. Email: SST@mptmail.net.mm